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THE CONTRIBUTION OF THE GEOGRAPHY OF DISABILITY TO THE DEVELOPMENT OF 'ACCESSIBLE TOURISM'

Abstract: The article presents an outline of the evolution of the geography of disability (since the 1930s) taking into account significant issues in the creation of theoretical foundations as well as practical action in 'accessible tourism'. It may be considered a review. Based on an analysis of literature, the first section presents a definition of 'accessible tourism' and the development of the geography of disability, the result of which is the geographical model of disability. The second section is a synthetic presentation of the effect of geographical research on the development of theoretical accessible tourism concepts and their implications in practice. The final conclusions highlight the need to identify the level of detail in universal design principles applied to buildings, spaces, services, which are to fulfil the criteria of accessibility for people with various types of disability.

Key words: geography of disability, accessible tourism, geographical model of disability.

1. INTRODUCTION

Geographers have been concerned with research in the field of disability since the 1930s and it has developed systematically in connection with social change (the increase in the number of people with a disability, the ageing population) and legislative changes (aimed at providing equal opportunities). It is also connected with the 'sanctioning of social issues as a distinct theme in geography' (in Poland, in 1983, LISOWSKI 2008: 201). The significant achievements of geographers in disability issues have led to the development of two distinct currents: the geography of disability (basic studies) and geography for the disabled (applied research). Much of this work, especially that carried out since the 1950s, due to the complexity of how disability is perceived in the context of the interaction between a person with a disability and the geographical environment (physical, social), has contributed to the growth of the currently widely propagated concept of 'accessible tourism'.

The article aims to present an outline of the evolution of research in the geography of disability taking issues which are vital in the creation of theoretical foundations as well as practical activities in the field of 'accessible tourism' into account. It may be considered a review. The first section presents the assumptions of

'accessible tourism' and the development of the geography of disability based on an analysis of literature. The second section is a synthetic presentation of the contribution of geographical research results to the development of the theoretical foundations of 'accessible tourism' as a concept and their implications in practice.

2. 'ACCESSIBLE TOURISM'

As awareness of the diverse needs of tourists, including those connected to disability rose, it led to the development of action promoted under numerous slogans applied interchangeably such as 'tourism for all' (NeumannConsult 2014), 'tourism without barriers' (NeumannConsult *et al.* 2014) and 'accessible tourism' (BUHALIS & DARCY 2011, GfK and others 2014). This action is undertaken on a national administrative level, organisations, social initiatives, and in the private tourism services sector. The term 'accessible tourism' is gaining in popularity and this is also thanks to numerous United Nations World Tourism Organization (UNWTO) publications,

including *The Manual on Accessible Tourism for All...* (2015). Accessible tourism is defined as: 'a form of tourism involving collaborative processes between stakeholders that enables people with access requirements, including mobility, vision, hearing and cognitive dimensions of access, to function independently and with equity and dignity through the delivery of universally designed tourism products, services and environments. This definition adopts a whole of life approach where people throughout their lifespan benefit from accessible tourism provision. These include people with permanent and temporary disabilities, seniors, obese, families with young children and those working in safer and more socially sustainable designed environments' (adapted from DARC Y & DICKSON, 2009: 34, DARC Y & BUHALIS (ed.), 2011: 10-11, BUHALIS, DARC Y & AMBROSE (ed.), 2012: 3, *Recommendations on Accessible Tourism* 2013: 4). In order for the concept of 'accessible tourism' to be realised, the cooperation and involvement of numerous subjects in the following fields is required:

1. **raising the awareness of tourism industry specialists** at all levels of tourism management and organisation through education, workshop and training programmes specifically designed to eliminate barriers hindering the development of 'accessible tourism', and to convince private enterprises that there are advantages to be gained by investing in 'accessible tourism', which become visible as quality improves and the competitiveness of a given enterprise increases;
2. **guaranteeing a general right to participate in tourism**, despite global economic uncertainty, through international cooperation;
3. **adhering to the principles of universal design** in the creation of new tourism infrastructure, products and services and the modernisation of those already in place;
4. **the development and application of intelligent technologies** in order to deliver objective information on all services (regardless of the degree of accessibility), enabling individual evaluation of accessibility by travellers, according to personal needs;
5. **tourism seen from a systemic perspective, providing universal accessibility in regard to all the elements in the tourism values chain** including the natural environment, transportation, tourist information and paratourism;
6. **the promotion and dissemination of best practices** contributing to universal accessibility in travel and tourism;
7. **strengthening cooperation with all interested parties in the field of universal accessibility in tourism on a international and regional scale**, engage representatives of the tourism sector, non-governmental bodies and people with disabilities in public-

private partnerships (PPP). Cooperation which involves people with disabilities should lead to the development of new, global policies on the elaboration of principles and their implementation contributing to the growth of accessible tourism.

The postulates presented are the basic recommendations of the *San Marino Declaration on Accessible Tourism* (2014). They are the result of much social debate, analyses of practices applied in the organisation of tourism for people with a disability, as well as scientific research carried out by representatives of many disciplines (including the geographical sciences), taking the experiences of people with disabilities regarding tourism into consideration. It should be noted that the concept of 'accessible tourism', which emphasises the need for universal design, takes into account the factors determining the tourism activity of many groups (not only people with a disability, but also the elderly, children and young people, families with children and others) who encounter restrictions of a structural nature (physical) or functional (connected to the organisation of tourism services) when travelling.

The article focuses on the accessibility of tourism for a selected group – people with a disability (PwD), assuming that disability in a general sense is related to a physical and/or mental dysfunction. The definition of disability has evolved through the development of numerous disability models such as the medical model (PARSONS 1951), the social model (OLIVER 1996, DARC Y & PEGG 2011) and the currently recommended bio-psychosocial model (*International Classification of Functioning, Disability and Health* (ICF) 2002, *World Report on Disability* 2011). This model is founded on the assumption that disability is a complex phenomenon, caused by a person's somatic problems (bodily) as well as a range of social conditions, and is the result of interaction between that individual's characteristics and the features of the surrounding environment in which he/she lives. Some of its aspects are connected almost entirely with 'internal' features i.e. individual to a given person, whereas others may be almost entirely external in nature (environmental). So it should therefore be accepted that if disability issues are to be eradicated, medical and social action is necessary (ICF 2002: 9). The bio-psychosocial model (BM) indicates several levels of disability: individual, institutional, social, connected to the characteristics of a given person, restrictions on activity or participation in the life of society, determined both by social and personal factors. The bio-psychosocial model is a synthesis of the assumptions of the social and medical models, thereby reducing errors arising from a one-sided approach to disability from a medical or social perspective (ICF 2002: 9).

Similar comprehensive assumptions formed the foundations of the geographical model of disability (GAINES 2004, ZAJADACZ & ŚNIADEK 2014) which takes into account the medical and social determinants of disability in the context of spatial relations: person – geographical environment (physical, social). This model developed gradually, on the basis of the results of geographical research into the various aspects of disability.

3. GEOGRAPHY OF DISABILITY

Geographers have been concerned with issues of disability since the 1930s (FARIS & DUNHAM 1939). In the following decades, research was undertaken mainly into disability: sensory, intellectual, motor, physical barriers (including architectural), the planning of public spaces, accessibility of transport, social relations (exclusion, marginalisation, equal opportunities), as

Table 1. Geography of disability – selected papers

	Author, year of publication, title of paper	Published by
Sensory disability	H.F. GILMAN (1987) Territorial concepts among Tampa's deaf community.	<i>Florida Geographer</i>
	T. SKELTON, G. VALENTINE (2003) It feels like being deaf is normal an exploration into the complexities of defining D/deafness and young D/deaf peoples' identities.	<i>Canadian Geographer</i>
	S.K. ANDREWS (1988) Applications of a cartographic communication model to tactual map design.	<i>The American Cartographer</i>
	R. BUTLER (1994) Geography and vision-Impaired and blind populations.	<i>Transactions of The Institute of British Geographers.</i>
	R.G. GOLLEDGE (1993) Geography and the disabled, a survey with special reference to vision impaired and blind populations.	<i>Transactions of the Institute of British Geographers</i>
	R.D. JACOBSON (1992) Spatial cognition through Tactile Mapping.	<i>Swansea Geographer</i>
	R.D. JACOBSON (1994a) GIS and the visually disabled, the spatial contribution to mobility.	<i>Mapping Awareness</i>
	R.D. JACOBSON (1994b) Navigation for the visually impaired going beyond tactile cartography.	<i>Swansea Geographer</i>
	R. KITCHIN, M. BLADES, R.G. GOLLEDGE (1997) Understanding spatial concepts at the geographic scale without the use of vision.	<i>Progress in Human Geography</i>
	R. KITCHIN, R.D. JACOBSON, R.G. GOLLEDGE, M. BLADES (1998) Belfast without sight, Exploring geographies of blindness.	<i>Irish Geography</i>
	J.W. WIEDEL (1966) Tactual maps for the visually handicapped.	<i>Professional Geographer</i>
Mental disability	S.M. BAIN (1971) The geographical distribution of psychiatric disorders in the North East Region of Scotland	<i>Geographia Medica: International Journal of Medical Geography</i>
	K.G. DEAN, H.D. JAMES (1981) Social factors and admission to psychiatric hospital schizophrenia in plymouth.	<i>Transactions of the Institute of British Geographers</i>
	M. DEAR (1977a) Locational factors in the demand for mental health care.	<i>Economic Geography</i>
	M. DEAR (1977b) Psychiatric patients and the inner city.	<i>Annals of the Association of American Geographers</i>
	G. GUDGIN (1975) The distribution of schizophrenics in Nottingham, A comment.	<i>Transactions of The Institute of British Geographers.</i>
	H. PARR, CH. PHILO, N. BURNS (2004) Social geographies of rural mental health, experiencing inclusions and exclusions.	<i>Transactions of the Institute of British Geographers</i>
Accessibility to transport	R. GANT (1992) Transport for the disabled.	<i>Geography</i>
	J.R. MARSTON, R.G. GOLLEDGE, C.M. COSTANZO (1997) Investigating travel behavior of nondriving blind and vision impaired people, The role of public transit.	<i>The Professional Geographer</i>
	S.D. NUTLEY (1980) Accessibility, mobility and transport-related welfare, The case of rural Wales.	<i>Geoforum</i>
	C. FRY (1988) Maps for the physically disabled.	<i>The Cartographic Journal</i>
barriers, accessibility of build-ings, public	R. BUTLER, S. BOWLBY (1997) Bodies and spaces, an exploration of disabled people's experiences of public space.	<i>Environment and Planning D: Society and Space</i>
	C. MCEWAN, R. BUTLER (2007) Disability and development, different models, different places.	<i>Geography Compass</i>
	CHURCH, J.R. MARSTON (2003) Measuring accessibility for people with a disability.	<i>Geographical Analysis</i>
	B. GLEESON (1997) Community care and disability, the limits to justice.	<i>Progress in Human Geography</i>
	B. GLEESON (2001) Disability and the open city.	<i>Urban Studies</i>

Source: A. ZAJADACZ (2012a, 2012b).

well as the participation of PwD in studies relating to disability, and the interpretation and implementation of research results (table 1). Many papers have presented a review of the work of geographers so far in this field, for example, *Geographies of disability* (GLEESON 1999), *Mind and Body Spaces Geographies of Illness, Impairment and Disability* (Butler & Parr 1999), and in other publications (CHOUINARD 1997, DORN 2001, KITCHIN 2000, PARK *et al.* 1998, PFEIFFER 2001, HANSEN & PHILO 2007, AITCHISON 2009, TAYLOR & JÓZEFOWICZ 2012, ZAJADACZ 2012a, 2012b).

A review of the results of geographical research into disability indicates they developed systemically, although up until the 1990s this was a niche sphere (IMRIE & EDWARDS 2007). Research was mostly focused on physical barriers arising within diverse types and different scales of spaces, and the results were supposed to lead to the reduction or removal of such barriers. However, these pioneering studies systemically contributed to changes in how disability is viewed not only from the perspective of the individual conditions (dysfunction) of a given person but also in the wider context of environmental factors, restricting full participation in the life of society.

The visible rise in geographers' interest in studies into disability has been termed 'the second wave' (AITCHISON 2009) beginning in the 1990s when critical works appeared, such as that by B. GLEESON (1996), in which he highlighted that disability is a key social issue (concerning approx. 15% of the global population) and cannot be ignored in geographical research. R. GOLLEDGE (1993) stated that researchers into human geography should note the fact that disability is clearly connected with socio-spatial relations (GOLLEDGE 1993). In discussions regarding 'the subject of the practical functions of geography such important issues as living conditions, including health and human existence, within the environment cannot be overlooked' (PARYSEK 1990, 2002: 7). The geographical perspective of research in the 1990s initiated changes in discourse on the definition of disability (from the medical, social point of view) towards taking the entire complex of socio-spatial determinants into account. The results contributed to action undertaken towards creating conditions in the geographical environment enabling PwD to function independently. Emphasis was placed on the need for 'equal opportunities' for PwD, who are often in a less privileged social position. Disability can lead to multiple layers of social problems developing: it can hinder access to education, work, transport, which in turn give rise to social marginalisation and poverty.

Geographers' interest in issues of marginalisation and social exclusion led to the development of studies concerning the principles shaping the accessible environment (BUTLER & BOWLBY 1997, KITCHEN 2000).

Both physical and social barriers, and institutional and political factors which restrict access to particular spaces were considered (IMRIE & HALL 2001). The significance of geographical research into social exclusion issues was highlighted by, amongst others, CHOUINARD (1994) who argued that the investigation of such issues 'signifies the position of academics who do not follow the latest 'fashion' only because it 'sells' well and who take the notion that knowledge means power seriously' (CHOUINARD 1994: 5).

Of significance to the paradigms accepted in geographical research were legislative changes regarding segregation and social discrimination, including: the *Union of Physically Impaired People Against Segregation* (UPIAS, 1976, Great Britain), *Americans with Disabilities Act* (ADA, 1990, USA) and the *Disability Discrimination Act* (DDA, 1995, amended in 2005, Great Britain). In accordance with the UPIAS (1976), the medical and rehabilitative concept of disability was rejected and emphasis was placed on understanding disability as a social and political issue. This change in attitudes opened up new directions in the search to understand problems of disability in society (IMRIE & EDWARDS 2007). In the UPIAS disability cannot be reduced to impairment – a medical state, but is treated as a complex of social and political attitudes and relations which do not value those with disabilities. Both in UPIAS declarations and political prognosis, as in later studies into social policy and in literature on disability and society, there has so far been a lack of a geographical perspective, an understanding that social identity and social processes are dependent on spatial – geographical points of reference.

Studies into the spatial relations of a person with a disability and the geographical environment also considered how people with disabilities were involved in the shaping of this environment. R. GOLLEDGE (1993) noted that PwD occupy 'transformed' and 'distorted' space, which was met with general criticism (TAYLOR & JÓZEFOWICZ 2012). Allegations mainly concerned the diversification of space and the creation of separate 'disability worlds' which can lead to social segregation.

Nevertheless, such analyses of actions undertaken by PwD regarding the organisation of the surrounding environment which reflects real needs, should be recognised as indications from 'lead users' in the process of universal design. Research results (GOLLEDGE 1993) indicated that PwD are actively involved in reshaping the landscape within the environment of their own everyday lives, creating a world of their own experiences. The motivating force is dysfunction, initial restrictions connected to disability, which having 'collided' with the urban landscape lead to changes aimed at the removal of any barriers encountered. Numerous works have indicated the

importance of the opinions and actions of people with disabilities as experts in developing optimal solutions (ZAJADACZ 2012, 2014). SKELTON & VALENTINE (2003) pointed out issues in the interpretation of research results related to ignoring the true opinions of PwD in relation to deaf communities who use sign language. The difficulties in carrying out research in this group, connected to the language barrier and the necessity of using a sign-language interpreter in order to communicate, can potentially lead to the exclusion of the true opinions of deaf people. Interpretation of content in either direction (for hearing people or deaf people) can cause distortions in meaning due to the interpreter's own understanding.

Geographical research has taken various spatial scales into consideration, including accessibility for PwD in urban spaces (JÓZEFOWICZ 2006, 2010), opportunities for PwD living in cities to do sports and active recreation (JÓZEFOWICZ 2007), and on a domestic micro-scale. This has shown how a home, usually a source of comfort guaranteeing privacy, can also be a trap for PwD or a zone of 'threatened privacy' due to the interference of third parties (carers, assistants) who may underestimate private space. Furthermore, it has also investigated issues connected with the ageing population (LIN & ZIMMER 2002) and ethics in disability studies (KITCHIN, 1999, KITCHIN & WILTON 2000). The results of geographical research are undoubtedly a challenge to preconceived judgements on what disability is and how it should be defined. M. HAWKESWORTH (2001) indicates the fluidity of a PwD's identity in different places, environments, the potential for stigma or rituals and practices which accompany efforts to 'blend in with' the surroundings to arise.

Numerous geographical papers have dealt with issues directly concerning tourism of PwD (AITCHISON 2009). For example, studies which presented the current state of research into the tourism of PwD in Poland (WYRZYKOWSKI & MARAK 2011). Problems of the accessibility of destinations and tourism sites have often been discussed (KOŁODZIEJCZAK & ZAJADACZ 2008) as have the motives of PwD who travel and the destinations they chose (FURMANEK & URBAŃSKA 2011). Cyclical studies into how deaf people spend their free time, their tourism and leisure practices have been undertaken (ZAJADACZ 2012a, 2012b, 2014). Complex studies dealing with tourism of PwD include the one edited by STASIAK & ŚLEDZIŃSKA (2008).

R. GOLLEDGE (1993: 81), following a review of geographical papers, proposed applying the term *geography of the disabled* to theoretical studies and *geography for the disabled* to research of an applied nature. Geography of disability, the subject of which are PwDs' experiences of spatial relations: person – geographical environment (natural and social) is currently recognised as a sub-discipline of geography (JACOBSON

2013). It covers a wide range of issues through which it is connected to many other disciplines. Geography of the disabled investigates the relation (treated as a complex of dynamic interactions) between the geographical environment and a PwD taking different degrees and types of disability into account. The role of PwDs' social relations is considered in various contexts from inclusion to marginalisation. Geography of disability refers to the experiences of PwD on a range of spatial scales: from urban to rural, from micro (mobility in their place of residence) to accessibility of transport (as a network of connections between cities and countries). Research concerns people with visible and invisible disabilities (e.g. the experiences of people with mobility issues, as well as invisible intellectual disabilities). Geographical studies contribute towards better adaptation of the geographical environment to the needs of PwD (especially in the field of universal design regarding accessible spaces, buildings and public services). Research also covers social, political and cultural factors of disability determinants (JACOBSON 2013). Geographers point out the different contexts for the definition of disability and propose a comprehensive perspective, as the result of the PwD – geographical environment relation.

4. THE IMPLICATIONS OF THE RESULTS OF GEOGRAPHICAL RESEARCH INTO 'ACCESSIBLE TOURISM'

A review of papers released to date, reveals two directions of geographical research (GOLLEDGE 1993, GLEESON 1996, IMRIE & EDWARDS 2007) which are of significance to the development of the 'accessible tourism' concept:

- theoretical – concerning interaction between people with diverse types of disability and the geographical environment,
- practical – covering principles of universal design in public spaces and the search for technical solutions to remove the barriers PwD encounter.

The **geographical model of disability (GM)** emerged from the theoretical current, alongside numerous other models (Table 2). It influences the reshaping of the supply structure of the tourism market which is accessible to PwD (compare ZAJADACZ & ŚNIADEK 2014).

The **geographical (geospatial) model of disability** (Fig. 1 GM) was created during research in the field of the geography of disability. 'In recent years, geographers have made significant strides towards understanding the spatiality of disability. This research has

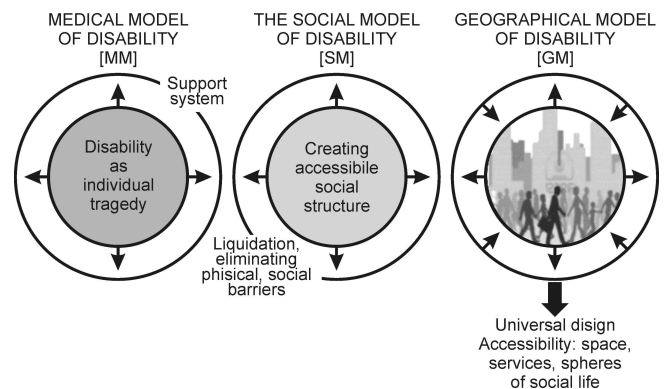
Table 2. Selected models of disability

Medical (MM)	Social (SM)	Geographical (GM)	Economic (EM)
PERSONAL problem	SOCIAL issues	SPACES issue	DEMAND issue
Medical care	Social integration	Spatial integration	Economic integration
Individual Treatment	Social action	Accessibility of places and spaces	Product development
Professional help	Individual and collective responsibility	Exploitation of geographical information systems to evaluate the accessibility of space regarding individual needs	Innovation in design and function
Personal adjustment	Environmental manipulation	Universal design	Universal design
Behaviour	Attitude	Person as an integral part of the geographical environment	Culture
Care	Human rights	Human rights	Competitive advantage
Health care policy	Politics	Politics, market forces	Market forces
Individual adaptation	Social change	Inclusion	Inclusion

Source: B. FORRESTER & D. DAVIS (2011), A. ZAJADACZ & J. ŚNIADEK (2014).

presented disability as a characteristic of the population that inevitably leads to marginalization and spatial exclusion from otherwise normal social arenas and spaces within the built environment' (BUTLER & BOWLBY 1997, GAINES 2004: 80). The GM concept applies experience gathered to date (connected to the MM and SM models) and focuses mainly on the interrelation between PwD and geographical space (CHOUINARD, HALL & WILTON 2010, ZAJADACZ & ŚNIADEK 2014). Geographers connect the nature of factors causing disability (*disabling nature*) both with social and spatial aspects of the human environment, they promote solutions which are more 'inclusive' and which provide access to sites and the full scope of life within society taking different degrees and types of disability into consideration. The GM also aims to remove social 'tensions' related to the SM which treats disability as a process of social exclusion (CHOUINARD, HALL & WILTON 2010). It assumes that limited ability is caused by both individual conditions (connected to a specific dysfunction) and those of the surrounding physical and social environment creating the restrictions which occur in the PwD – environment (social, physical) relation. The GM has accepted a significant paradigm in that it treats needs connected to various types and degrees of disability not as 'special' but as one of many which occur in contemporary society. Universal design should therefore consider the nature of these needs in the creation of maximally accessible buildings, sites and public services (IMRIE 2012, ZAJADACZ 2014). The central postulate is not to concentrate on 'disabilities', but to focus on various social needs and adapt the geographical environment (social, as well as physical) accordingly.

The GM, similar to the biopsychosocial model of disability, is mainly focused on developing social



A/ The arrows symbolise the main direction of action connected to: desire take away a person's disability [MM], removal or elimination of barriers and restrictions occurring in the physical and social environment [SM], exploiting the individual potential of each person and the development of universal design respecting the needs of as great a section of society as possible, including PwD, not recognising however any group of needs as special [GM].

Fig. 1. Models of disability: medical, social, geographical
Source: A. ZAJADACZ & J. ŚNIADEK (2014)

inclusion. Social inclusion is a process where people with disabilities have the opportunity and resources necessary to participate fully in economic, social and cultural life and to maintain a standard of living which is acknowledged as normal in a given society. At the same time, it is important to guarantee PwD greater participation in the deciding processes which affect their lives and access to basic rights. In accordance with this approach, features connected to disability are not treated as 'special' but rather as one of many occurring in society. For people who have various physical or sensory restrictions, a universally prepared product ensures easy and independent access. This

approach is in accordance with all the assumptions of the accessible tourism concept to the highest degree (DARCY & DICKSON, 2009: 34, DARCY & BUHALIS (eds.), 2011: 10-11, BUHALIS, DARCY & AMBROSE (eds.), 2012: 3).

The practical current in geographical research led to the identification of the nature of barriers occurring in the geographical environment encountered by people with various types of disability (Table 1) and on different spatial scales. The results served to create tools enabling mobility (including the use of mental maps, navigation systems, adding data on the accessibility of spaces, tourist services buildings) to the tourist information system. A further subject of interest were the characteristics of PwDs' tourism practices (motives, scope of travel, organisation methods etc). The research results indicated the heterogeneous nature of tourism demand from PwD (ZAJADACZ 2012a) which determines the need for the creation of diverse tourism products and breaks down the stereotype which sees tourists with disabilities as a homogeneous group. Of significance to the realisation of the assumptions of accessible tourism in geographical research is respect for the involvement of PwD as experts in the field for the search for optimal solutions in universal design, covering both the spaces and the tourism products offered. Of further practical implication is systemic recognition in geographical studies of the determinants of disability which correspond to recommendations regarding universal accessibility for all elements in the tourism value chain (*San Marino Declaration...* 2014).

5. SUMMARY

One characteristic of research in the geography of disability field is a comprehensive approach to understanding disability, determined by the features of an individual (body and mind) and environmental (social, physical). In the course of the evaluation of the accepted disability models, in particular the medical model (highlighting an individual's dysfunction), geographical research connected both concepts, emphasising the fact that human behaviour varies according to a person's individual characteristics as well as the features of the space within which a person functions as a normal phenomenon. The work of N. HANSEN & CH. PHILO (2007) and R. BUTLER & H. PARR (1999) are of significance here in highlighting this paradigm. Consistently developed by geographers and included in the geographical model of disability, such an approach is in accordance with the currently accepted understanding of disability (*World Report on Disability* 2011). The results of geographical studies have

contributed to knowledge on the accessibility of space (on a micro, meso and macro-scale) for people with various types of disability in social and physical contexts. The findings can be applied in the universal design of spaces, especially in relation to tourism which is an area of life closely connected to mobility. Accessible tourism growth is possible thanks to the application of geographical studies in:

- a systemic approach to the determinants of disability and the tourism products offered;
- the tourism information system (including GIS tools);
- diverse spatial scales (from local – providing a direct tourism service to global – including transport issues);
- the elimination of social 'tensions' related to the accepted social model of disability (treating disability as the result of social barriers) and accepting diversity in society in regard to features and behaviour (including those related to disability) as normal;
- the inclusion of PwD as study participants, the interpretation and implementation of research results.

Despite the significant achievements of geographers in the field of research on disabilities, their long tradition and increased intensity (from the 1990s – the 'second wave') this current can still be acknowledged as marginal both in geographical sciences and in research on disability. There is an ongoing need to broaden this area of research (GOLLEDGE 1993). The development of theoretical studies (within the 'geography of disability' framework) should concentrate on current issues – defining the basic level of spatial accessibility which PwD expect (in other words, the features of universal space). The second current from the field of applied research ('geography for the disabled') should include the development of expertise aimed at improving lifestyle and quality of life for PwD in the social space they inhabit and which they co-create. The two currents can significantly contribute towards the development of accessible tourism in a theoretical as well as pragmatic aspect.

FOOTNOTE

¹ According to the Act of September 27 1997 on professional and social rehabilitation and employment of people with a disability Dz.U. [Journal of Laws] No. 123, item 776, (including later amendments) "disability – signifies a permanent or temporary inability to fulfill social roles due to a permanent or long-term impairment to the body, which in particular leads to an inability to work".

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